

ZHEJIANG MSD NEW MATERIAL CO., LTD

NO.11, HONGQI ROAD, WARP KNITTING INDUSTRIAL PARK OF HAINING, ZHEJIANG, CHINA

The following sample(s) was / were submitted and identified on behalf of the client as:

Sample Description: PVC FILM

Supplier: ZHEJIANG MSD NEW MATERIAL CO., LTD

Manufacturer: ZHEJIANG MSD NEW MATERIAL CO., LTD

Test Requested:

To determine the flammability (building materials class B2) in accordance with DIN 4102-1 (May 1998) Fire behaviour of building materials and elements Part 1: Classification of building materials, Requirements and testing

Test Results: -- See attached sheet --

Conclusion: The tested samples **meet** the Normal flammability requirements of class B2 of building materials under DIN 4102-1 (May 1998).

Test Period:

Sample Receiving Date : APR.07, 2013

Test Performing Date : APR.07, 2013 TO APR.18, 2013

Signed for and on behalf of
SGS-CSTC Co., Ltd.

Allen Zou
Technical Supervisor

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at http://www.sgs.com/terms_and_conditions.htm and for electronic format documents, subject to Terms and Conditions for Electronic Documents at www.sgs.com/terms_e-document.htm. Attention is drawn to the limitation of liability, jurisdiction and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its issue and is valid only within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 30 days only.

I. Test conducted

This test was conducted as per DIN 4102-1:1998 Clause 6.2. Classification in according to DIN 4102-1 (May 1998) Clause 6.2. Class B2 materials

II. Sample details

Name	PVC FILM
Color	1. Sample A: Light yellow, 2. Sample B: Brown, 3. Sample C: White
Density	1. Sample A: 474g/m ² , 2. Sample B: 478g/m ² , 3. Sample C: 490g/m ² ,
Size of sample	230mm × 90mm

Conditioning

Prior to testing, the sample was conditioned at least 14 days to constant mass at a temperature of 20 °C.

III. Test results

Normal Flammability Test according to DIN 4102-1 Clause 6.2

Flame application: [] bottom edge ignition, [] surface ignition

1. Sample A

Specimen No.	1	2	3	4	5
Reaching the measuring mark within 20 seconds	No	No	No	No	No
Self extinguishing of the flame (s)	15	15	15	15	15
Max. flame height (cm)	12	11	11	10	11
End of afterflaming (s)	15	15	15	15	15
End of afterglowing (s)	15	15	15	15	15
Molten dripping	No	No	No	No	No
Smoke developments (visual impression)	Slight				

To be continued...

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at http://www.sgs.com/terms_and_conditions.htm and for electronic format documents, subject to Terms and Conditions for Electronic Documents at www.sgs.com/terms_e-document.htm. Attention is drawn to the limitation of liability, jurisdiction and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its issuance only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 30 days only.



2. Sample B

Specimen No.	1	2	3	4	5
Reaching the measuring mark within 20 seconds	No	No	No	No	No
Self extinguishing of the flame (s)	15	15	15	15	15
Max. flame height (cm)	10	10	9	10	11
End of afterflaming (s)	15	15	15	15	15
End of afterglowing (s)	15	15	15	15	15
Molten dripping	No	No	No	No	No
Smoke developments (visual impression)	Slight				

3. Sample C

Specimen No.	1	2	3	4	5
Reaching the measuring mark within 20 seconds	No	No	No	No	No
Self extinguishing of the flame (s)	15	15	15	15	15
Max. flame height (cm)	8	9	9	10	9
End of afterflaming (s)	15	15	15	15	15
End of afterglowing (s)	15	15	15	15	15
Molten dripping	No	No	No	No	No
Smoke developments (visual impression)	Slight				

All timings are from start of testing

Comments:

[] DIN 4102-B2; [] DIN 4102-B3

Criteria for classification for Class B2 (DIN 4102-1 Clause 6.2.2)

All materials, may be classed as B2 materials if they,

Pass DIN 4102-1 Clause 6.2.3 Ignitability Test

For each specimen, flaming doesn't reach the gage mark within 20s after flame application.

To be continued...

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at http://www.sgs.com/terms_and_conditions.htm and for electronic format documents, subject to Terms and Conditions for Electronic Documents at www.sgs.com/terms_e-document.htm. Attention is drawn to the limitation of liability, jurisdiction and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its issue and is valid only within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise indicated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 30 days only.

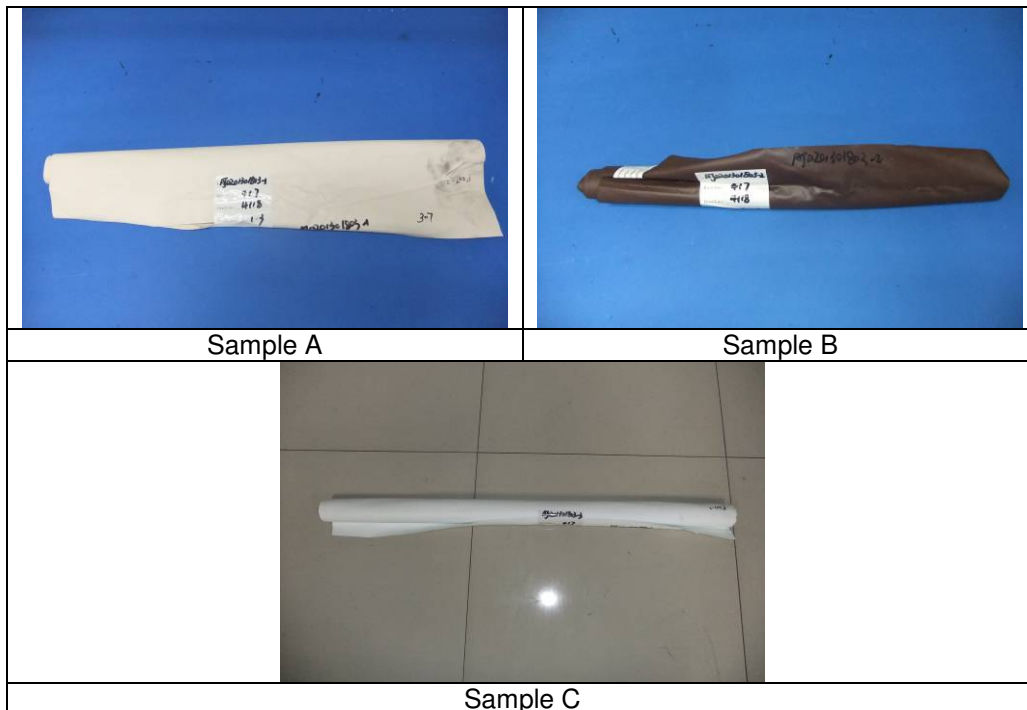


STATEMENTS:

This test report does not replace any mandatory certification of the product that may be required.

The test results relate to the behaviour of the test specimens of a product under the particular conditions of the test; they are not intended to be the sole criterion for assessing the potential fire and smoke hazard of the product in use.

Photo Appendix:



End of Report

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at http://www.sgs.com/terms_and_conditions.htm and for electronic format documents, subject to Terms and Conditions for Electronic Documents at www.sgs.com/terms_e-document.htm. Attention is drawn to the limitation of liability, jurisdiction and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its issue and is valid only within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 30 days only.